

Claims

What is claimed is:

- 1) A system for permitting a seeking entity to establish a new business relationship with a sought entity, the system comprising:
a computer including a storage for storing data and instructions and a processor for executing instructions stored in the storage; the storage containing instructions corresponding to:
 - a) an inquiry receiving component for receiving an inquiry from the seeking entity;
 - b) a response receiving component for receiving a response indicating an existing relationship between the sought entity and an intermediate entity; and
 - c) a confirming component for confirming, based on the response, that the new relationship may be established.
- 2) A transitive trust network system including a plurality of interconnected entities for sharing information comprising:
 - a) at least one entity trust list containing at least one characteristic of at least two of the entities; and
 - b) at least one transactional trust list containing at least one parameter relative to an exchange between at least two of the entities through at least one degree of separation between the entities;wherein the system retrieves information from the entity trust list and the transactional trust list in order to provide a framework for at least two of the entities to establish relationships between one another.
- 3) The transitive trust network system according to claim 2, wherein the plurality of interconnected entities correspond to nodes on a network.
- 4) The transitive trust network system according to claim 3, wherein the network is a wide area network.
- 5) The transitive trust network system according to claim 3, wherein the network is the Internet.
- 6) The transitive trust network system according to claim 3, wherein the entities are business entities, and wherein the system provides a framework for the business entities to discover, validate and establish business relationships over the network.

- 7) The transitive trust network system according to claim 2, wherein the at least two entities have capabilities of sharing information about other entities, each of the other entities being at least one of a business partner and a known contact.
- 8) The transitive trust network system according to claim 2, wherein the entity trust list contains, for a respective entity, at least one of: names of known entities and identifying characteristics thereof; previous transactions between the respective entity and other entities; historical transactions between the respective entity and other entities; quality ratings of the historical transactions; overall rating of other entities; and map of entity relationships.
- 9) The transitive trust network system according to claim 8, wherein the map of entity relationships includes at least information that identifies entities and which other entities they know, and information about how relationships were formed between such entities.
- 10) The transitive trust network system according to claim 2, wherein the transactional trust list has proxy trust parameters and activity trust parameters.
- 11) The transitive trust network system according to claim 10, wherein the proxy trust parameters include at least: an ability of a respective entity to forward requests to other trusted entities; ability to add new entities as trusted entities; ability to communicate opinions about a predetermined entity to other entities; and ability to dynamically create proxy parameters that are specified by any two cooperating entities.
- 12) The transitive trust network system according to claim 10, wherein activity trust parameters include at least: types of transactions a respective entity can handle; activity trust levels; and past activity with a predetermined entity.
- 13) A transitive trust network system including a plurality of interconnected entities for sharing information comprising:
- a) an entity trust list containing at least one characteristic of at least two of the entities;
 - b) a transactional trust list containing at least one parameter relative to an exchange between at least two of the entities through at least one degree of separation between the entities; and
 - c) a capability domain and activity trust level data base for each of the at least two entities, the data base having a plurality of levels of trust and a plurality of entity roles;
- wherein the system retrieves information from the entity trust list and the transactional trust list in order to provide a framework for at least two of the entities to establish

relationships between one another.

- 14) The transitive trust network system according to claim 13, wherein each respective role in the plurality of roles defines a respective function that one entity fulfills to another entity.
- 15) The transitive trust network system according to claim 13, wherein each respective level of trust in the plurality of levels of trust defines a respective degree of trust between one entity and another entity.
- 16) The transitive trust network system according to claim 13, wherein a respective business process of a plurality of business processes is associated with each combination of a respective role of the plurality of roles and a respective trust level of the plurality of trust levels.
- 17) A transitive trust network system including a plurality of interconnected entities for sharing information comprising: a capability domain and activity trust level data base for each of the at least two entities, the database having a plurality of levels of trust and a plurality of entity roles, wherein the system retrieves information from the entity trust list and the transactional trust list in order to provide a framework for at least two of the entities to establish relationships between one another.
- 18) The transitive trust network system according to claim 17, wherein each respective level of trust in the plurality of levels of trust defines a respective degree of trust between one entity and another entity.
- 19) The transitive trust network system according to claim 17, wherein each respective role in the plurality of roles defines a respective function that one entity fulfills to another entity.
- 20) The transitive trust network system according to claim 17, wherein a respective business process of a plurality of business processes is associated with each combination of a respective role of the plurality of roles and a respective trust level of the plurality of trust levels.
- 21) A method of establishing a new business relationship with a sought entity over a network, the method comprising:
 - a) sending an inquiry to an intermediate entity to determine if the intermediate entity has an existing relationship with the sought entity;
 - b) receiving a response from the intermediate entity indicating an existing relationship between the sought entity and the intermediate entity; and
 - c) establishing the new business relationship with the sought entity based on the response.

- 22) The method of claim 21, further comprising specifying an acceptable degree of separation and determining whether the existing relationship exists within the specified degree of separation.
- 23) A method of establishing a relationship with an unknown company comprising:
- a) querying at least one trusted company to determine the existence of a relationship between the at least one trusted company and the unknown company;
 - b) receiving a confirmation of a relationship between the at least one trusted company; and
 - c) establishing a relationship with the unknown company in response to receiving the confirmation.
- 24) A method of establishing relationships between at least two entities comprising the steps of:
- a) receiving at a second entity a contact identifying a first entity;
 - b) checking a list of trusted entities by the second entity to determine if the first entity is a trusted entity;
 - c) querying, if the first entity is not a trusted entity, the trusted entities and specifying a predetermined degree of separation; and
 - d) establishing a relationship between the first and second entities when the first entity is known by at least one respective entity of the trusted entities.
- 25) The method according to claim 24, wherein the method further comprises providing a capability domain and activity trust level data base for each of entities, the database having a plurality of levels of trust and a plurality of entity roles.
- 26) The method according to claim 25, wherein each respective role in the plurality of roles defines a respective function that one entity fulfills to another entity.
- 27) The method according to claim 25, wherein each respective level of trust in the plurality of levels of trust defines a respective degree of trust between one entity and another entity.
- 28) The method according to claim 25, wherein a respective business process of a plurality of business processes is associated with each combination of a respective role of the plurality of roles and a respective trust level of the plurality of trust levels.
- 29) The method according to claim 24, wherein the method further comprises providing a capability domain and activity trust level database for each of entities, the matrix having a plurality of levels of trust and a plurality of entity roles.

- 30) A method in a transitive trust network for providing a framework for at least two entities to establish relationships between one another, comprising the steps of:
- a) receiving at a second entity a contact identifying a first entity;
 - b) checking a list of trusted entities, associated with the second entity, by the second entity to determine if the first entity is a trusted entity;
 - c) querying, if the first entity is not a trusted entity, by the second entity at least a third entity of the trusted entities associated with the second entity, and specifying a predetermined degree of separation;
 - d) checking a list of trusted entities, associated with the third entity, by the third entity to determine if the first entity is a trusted entity;
 - e) continuing querying and checking, if the first entity is not a trusted entity, until a maximum separation of the degree of separation is reached or until the first entity is known to a respective trusted entity; and
 - f) establishing a relationship between the first and second entities when the first entity is known by at least one respective entity of the trusted entities.
- 31) The method according to claim 30, wherein the method further comprises providing a capability domain and activity trust level data base for each of the entities, the data base having a plurality of levels of trust and a plurality of entity roles.
- 32) The method according to claim 31, wherein each respective role in the plurality of roles defines a respective function that one entity fulfills to another entity.
- 33) The method according to claim 31, wherein each respective level of trust in the plurality of levels of trust defines a respective degree of trust between one entity and another entity.
- 34) The method according to claim 31, wherein a respective business process of a plurality of business processes is associated with each combination of a respective role of the plurality of roles and a respective trust level of the plurality of trust levels.
- 35) A method in a transitive trust network for providing a framework for Companies to establish relationships between one another, comprising the steps of:
- a) contacting a first company by a second company regarding a potential relationship;
 - b) checking, by the first company, a trusted user list thereof and determining if the second company is known to the first company;
 - c) querying, by the first company when the second company is unknown, companies that are trusted users thereof to determine who is available for peer requests;

- d) notifying, by a third company, the first company that the third company is an active peer;
 - e) verifying, by the third company, a rights management model that exists between the third company and the first company;
 - f) querying, by the first company, the third company to determine if the second company is known to the third company, specifying a maximum of a predetermined number of degrees of separation;
 - g) querying, by the third company when the second company is unknown, companies that are trusted users thereof to determine who is available for peer requests;
 - h) forwarding, by the third company, based on a respective list of peers thereof and a trust agreement between the first company and the third company, a "Do You Know" query to further Companies on behalf of the first company, verifying rights management models between all peers;
 - i) verifying by the further Companies the rights management model and determining if any of the further Companies know the second company;
 - j) querying, by a respective company of the further Companies when the respective company knows the second company, the second company to determine if the second company is active for peer requests;
 - k) responding by the respective company to the third company with an affirmative on knowing the second company;
 - l) notifying, by the third company, the first company that the third company knows the second company through the predetermined number of degrees of separation, and passing transitive trust rights to the first company;
 - m) establishing, by the first company, contact with the respective company through the trust passed by the third company;
 - n) querying, by the first company, the further company for an "opinion" on the second company, the further company providing feedback based on rights rules; and
 - o) establishing, by the first company, a relationship with the second company based on the feedback from the further company.
- 36) A computer-readable medium for use in a transitive trust network for providing a framework for at least two of the entities to establish relationships between one another, the computer-readable medium having computer-executable instructions for performing the steps comprising:

- a) receiving at a second entity a contact identifying a first entity;
 - b) checking a list of trusted entities by the second entity to determine if the first entity is a trusted entity;
 - c) querying, if the first entity is not a trusted entity, the trusted entities and specifying a predetermined degree of separation; and
 - d) establishing a relationship between the first and second entities when the first entity is known by at least one respective entity of the trusted entities.
- 37) A computer-readable medium having stored thereon a data structure comprising:
- a) a capability domain having a plurality of entity roles within a predetermined degree of separation; and
 - b) an activity trust domain having a plurality of levels of trust;
 - c) a respective business process of a plurality of business processes being associated with each combination of a respective role of the plurality of roles and a respective trust level of the plurality of trust levels.
- 38) The computer-readable medium having stored thereon a data structure according to claim 37, wherein each respective role in the plurality of roles defines a respective function that one entity fulfills to another entity.
- 39) The computer-readable medium having stored thereon a data structure according to claim 37, wherein each respective level of trust in the plurality of levels of trust defines a respective degree of trust between one entity and another entity.